



Virginia Retirement System Overview

**Presented to: Commission on Employee
Retirement Security and Pension Reform**

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VRS Overview

VRS Total Membership



	Plan 1	Plan 2	Hybrid*	Total
Teachers	89,979	37,571	21,142	148,692
Political Subdivisions	57,605	32,605	15,699	105,909
State Employees	46,408	19,157	12,017	77,582
State Police Officers' Retirement System (SPORS)	1,403	553	–	1,956
Virginia Law Officers' Retirement System (VaLORS)	4,547	4,553	–	9,100
Judicial Retirement System (JRS)	268	69	82	419
Total Active Members	200,210	94,508	48,858	343,658

Total Active Members	Retirees/ Beneficiaries	Inactive/ Deferred Members	VRS Total Population
343,658	191,882	141,971	677,511

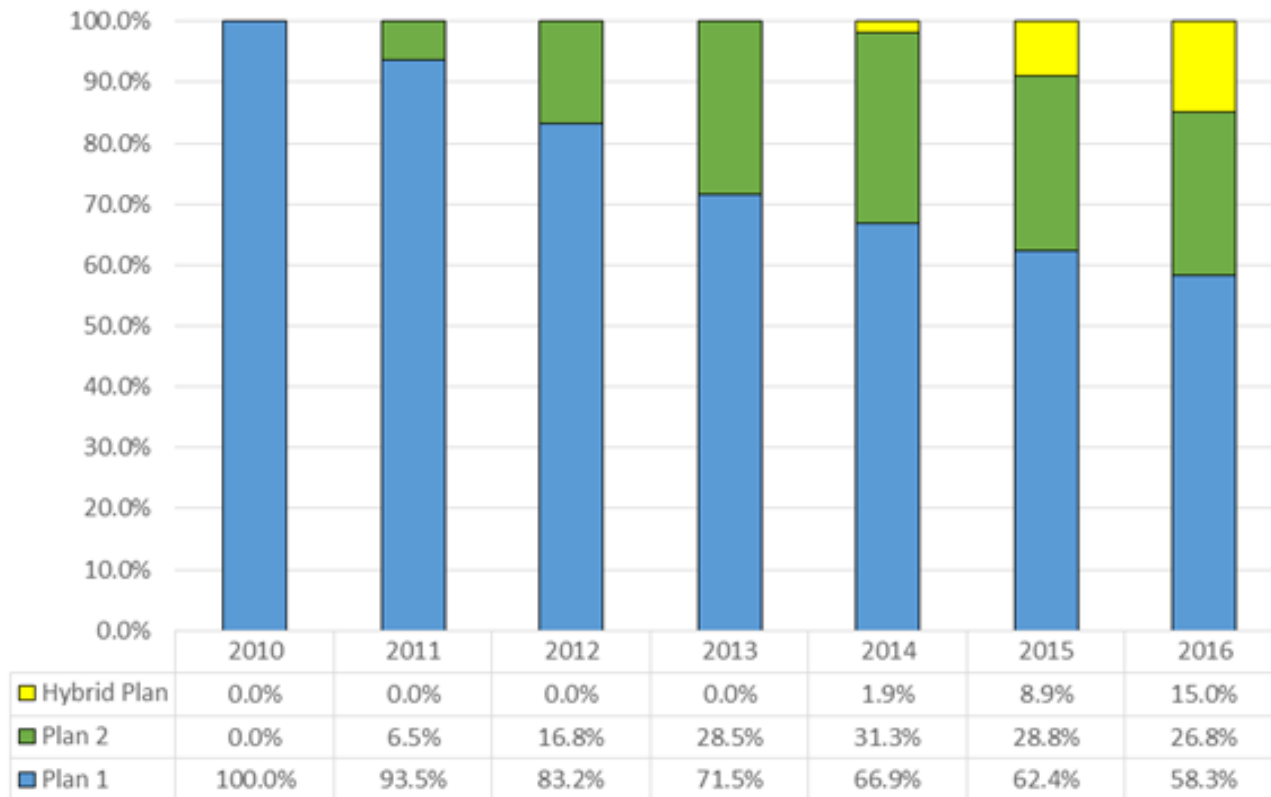
* Hazardous duty members are not eligible for this plan.

As of May 31, 2016

Plan Membership Chart



VRS Plans with Hybrid Benefit Level
Percentage of Members by Plan at Fiscal Year End



* Aggregate results for State, Teachers, Judges, and Political Subdivisions

* For fiscal years 2013 and beyond, members who were not vested were transitioned to Plan 2



Pension Reform

Pension Reform Efforts in Virginia



Year	Reform Effort
2008	General Assembly requests JLARC Compensation Study
2010	<p>General Assembly creates Plan 2 for members hired on or after July 1, 2010:</p> <ul style="list-style-type: none">▪ Normal retirement changed to Social Security normal retirement age▪ Unreduced benefits commencing at Rule of 90▪ Reduced retirement moved to age 60 with at least five years of service▪ Members required to pay 5 percent member contribution▪ COLA formula revised▪ Five-year AFC formula▪ Multiplier of 1.65% (Plan 1 multiplier 1.7%)
2011	<p>General Assembly enacted 5/5 program for Plan 1 state employees</p> <ul style="list-style-type: none">▪ State employee Plan 1 members pay 5 percent member contribution▪ Offset with 5 percent salary increase <p>JLARC updated study on pension reform</p>

Pension Reform Efforts in Virginia



Year	Reform Effort				
2012	General Assembly requires:				
	<ul style="list-style-type: none">Local employees pay 5 percent member contribution, phased in by July 1, 2016, with salary offsetNon-vested Plan 1 employees benefit structure change, January 1, 2013; approximately 35,000 active members converted from Plan 1 to Plan 2A hybrid plan for all general state and local employees hired on or after January 1, 2014				
	General Assembly proposes to phase-in contribution rates for the teacher and state plans to the VRS board-certified rates:				
		July 1, 2012	July 1, 2014	July 1, 2016	July 1, 2018
	State	67.02%	78.02%	89.01%	100%
	Teachers	69.53%	79.69%	89.84%	100%

Pension Reform Efforts in Virginia



Year	Reform Effort
2013	<p>VRS modifies funding policy in reaction to new GASB pension reporting requirements:</p> <ul style="list-style-type: none">▪ New amortization policy requires closed amortization of unfunded liabilities rather than open/rolling amortization.▪ Legacy unfunded liabilities as of June 30, 2013, will be amortized over 30-year closed period ending in 2043.▪ Future gains/losses after June 30, 2013, will be amortized over explicit 20-year closed periods.

Pension Reform Efforts in Virginia



Year	Reform Effort
2014	<p>Implemented Hybrid Retirement Plan:</p> <ul style="list-style-type: none">• Members enrolled (state, JRS, teachers and local government employees) automatically as of 1/1/2014• One-time election window for Plan 1/Plan 2 employees• Public safety employees with hazardous duty coverage not covered• Provides a new optional disability program for localities• Benefit provisions mirror Plan 2 for the DB portion, except for 1% multiplier• Members pay 5 percent member contribution (4% DB, 1% DC)
2015	<p>Purchase of Prior Service (PPS) changes effective January 1, 2017:</p> <ul style="list-style-type: none">• Reduces number of months eligible to purchase in certain categories• Modifies cost structure to make more cost neutral to the plan

Impact of Pension Reform on Plan Costs



	VRS State Retirement Plan			
	VRS Plan 1	VRS Plan 2	Hybrid	Blended Rate
Total Benefit Normal Cost	9.64%	8.95%	5.17%	9.10%
Member Contribution Rate	5.00%	5.00%	4.00%	4.92%
Employer Normal Cost Rate	4.64%	3.95%	1.17%	4.18%
Employer Match to Hybrid DC Plan	0.0%	0.0%	1.21%	0.10%
Administrative Expense	0.27%	0.27%	0.27%	0.27%
Total Employer Rate without Unfunded Amortization Cost	4.91%	4.22%	2.65%	4.55%
Percentage of Normal Cost Paid by Member	51.87%	55.87%	77.37%	54.07%

- With advent of pension reforms in recent years, the normal cost rate for employers has been reduced as more members enter the new plan designs.
- Employers are provided a blended rate based on the demographics of the members in the plan.
- As more members enter the hybrid plan, the employer normal cost rate will continue to move towards the lower 2.65% rate lowering contribution requirements.



Hybrid Retirement Plan

Hybrid Retirement Plan



- Total combined balance in the Hybrid 401(a) Cash Match Plan and the Hybrid 457 Deferred Compensation Plan is \$65.7 million for active members as of July 1, 2016.
- Approximately 7,140, or 14.5%, of hybrid plan members are making voluntary contributions.
- Auto-escalation begins January 1, 2017.

Schedule of Hybrid Contributions

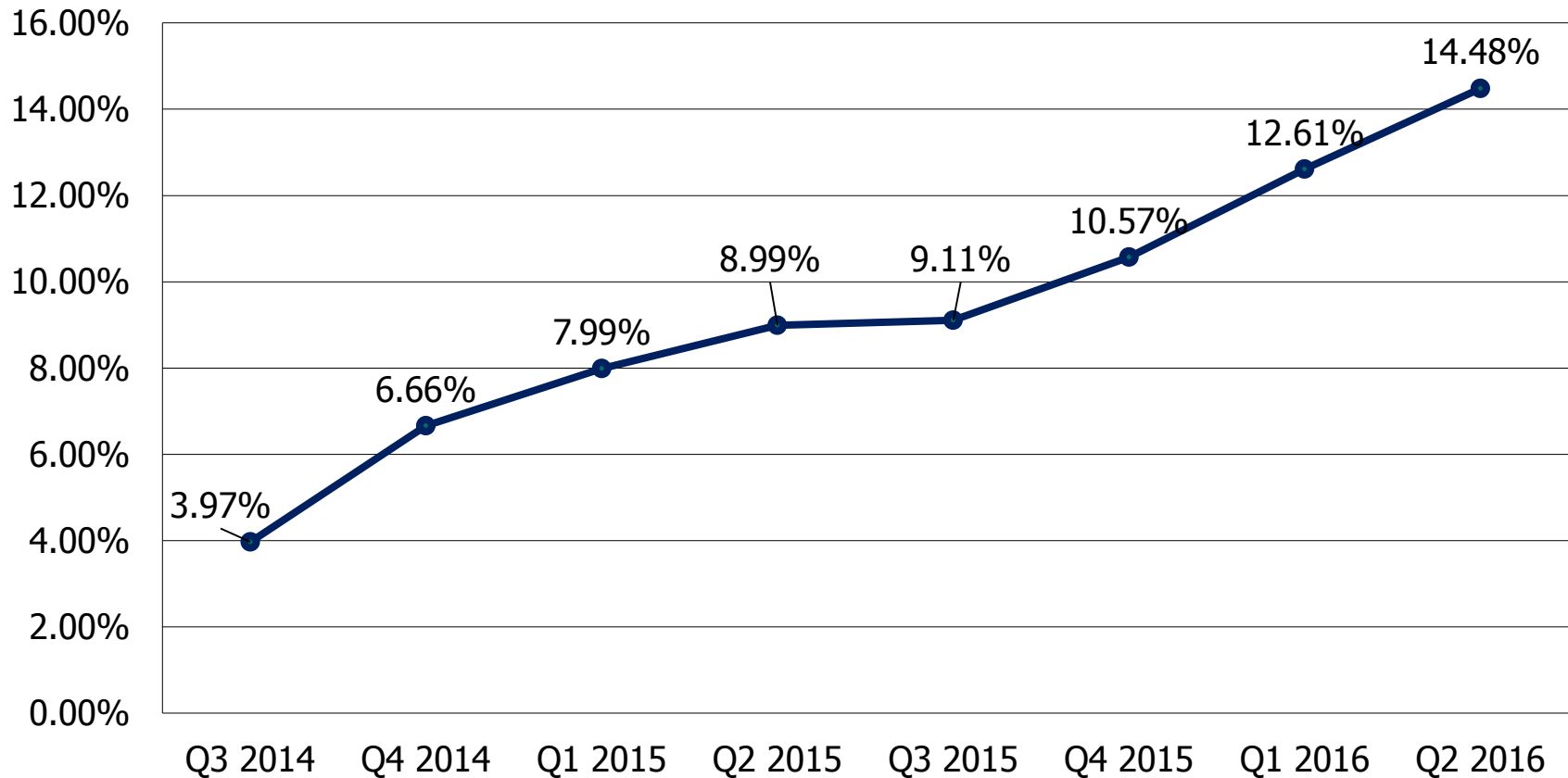


Defined Benefit (DB) Plan Contributions		
CONTRIBUTIONS	EMPLOYEE	EMPLOYER
Mandatory	4.00%	Total employer contribution rate, less employer DC contributions
Defined Contribution (DC) Plan Contributions		
CONTRIBUTIONS	EMPLOYEE HYBRID 401(a)	EMPLOYER HYBRID 401(a)
Mandatory	1.00%	1.00%
Voluntary	VOLUNTARY HYBRID 457	MATCHING HYBRID 401(a)
	0.00% 0.00%
	0.50% 0.50%
	1.00% 1.00%
	1.50% 1.25%
	2.00% 1.50%
	2.50% 1.75%
	3.00% 2.00%
	3.50% 2.25%
	4.00% 2.50%

Hybrid Retirement Plan



Hybrid Voluntary Contribution Participation Rate



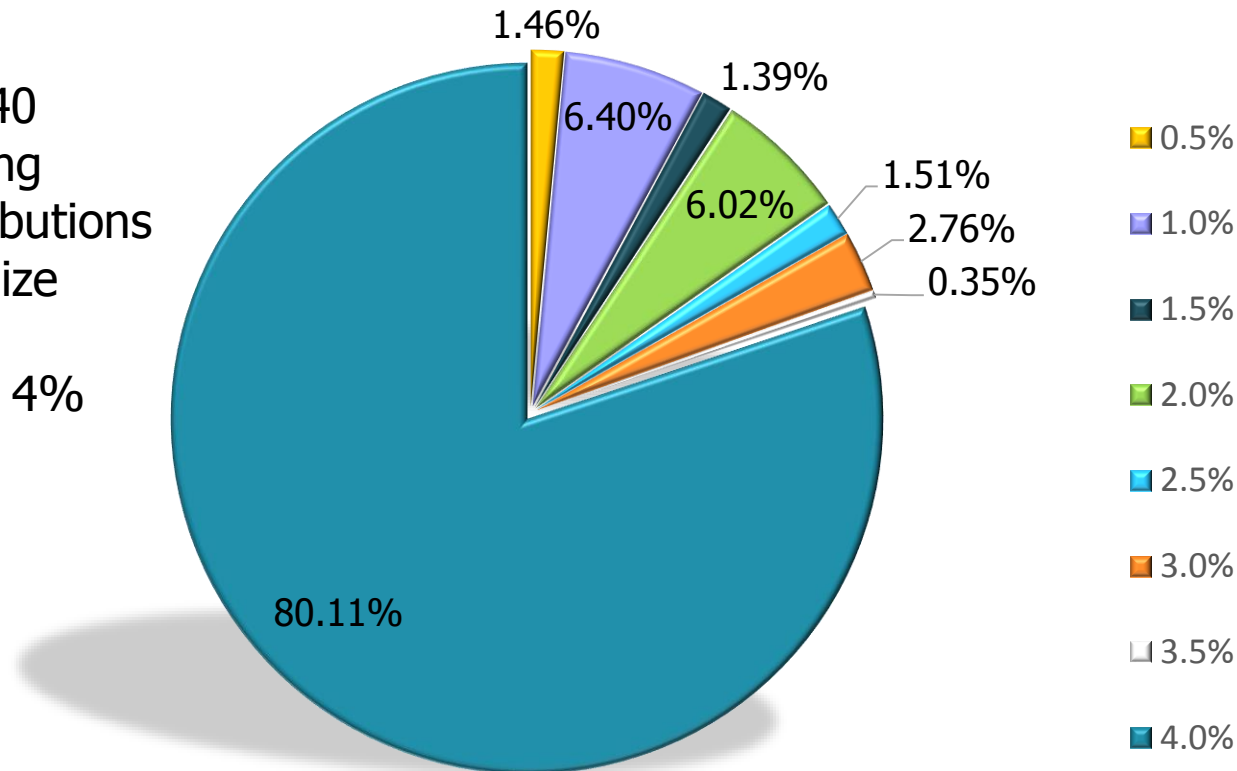
As of July 1, 2016

Hybrid Retirement Plan



Percent of Voluntary Contribution Members Electing Each Voluntary Contribution Percentage

80% of the 7,140 members electing voluntary contributions chose to maximize their voluntary contributions at 4%

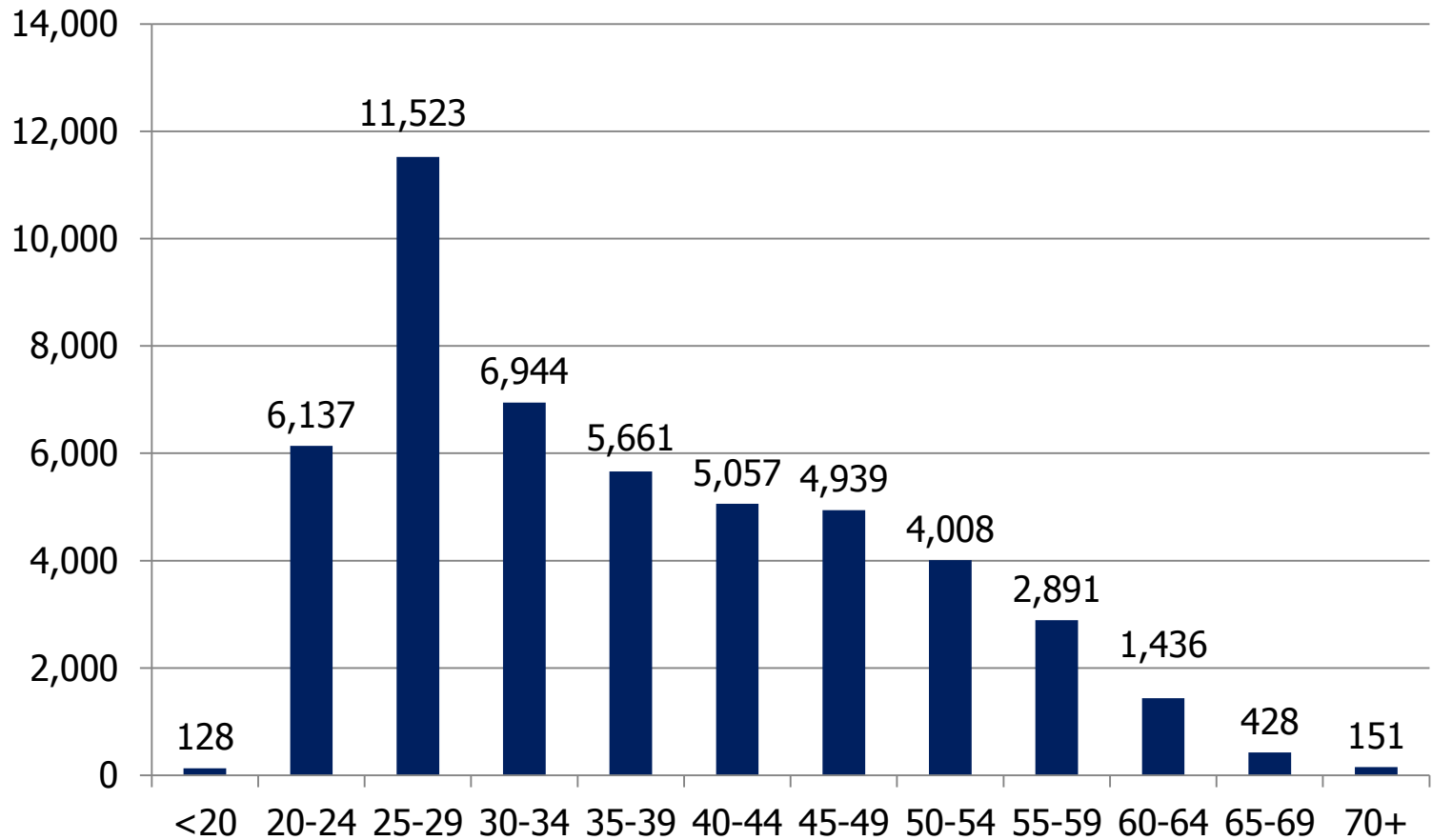


As of July 1, 2016

Hybrid Retirement Plan



Hybrid Retirement Plan Members by Age

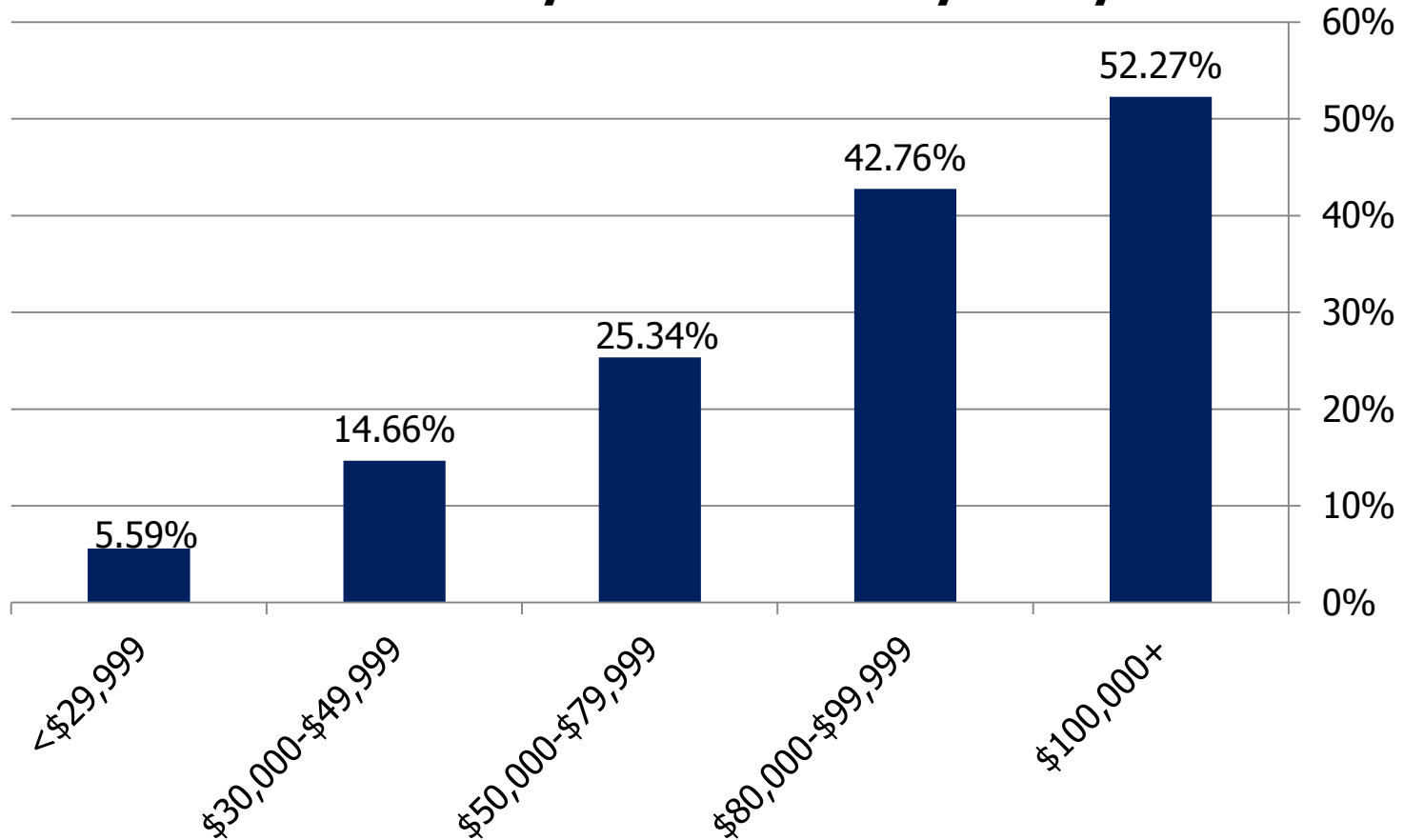


As of July 1, 2016

Hybrid Retirement Plan



**Percentage of Hybrid Members making
Voluntary Contributions by Salary**

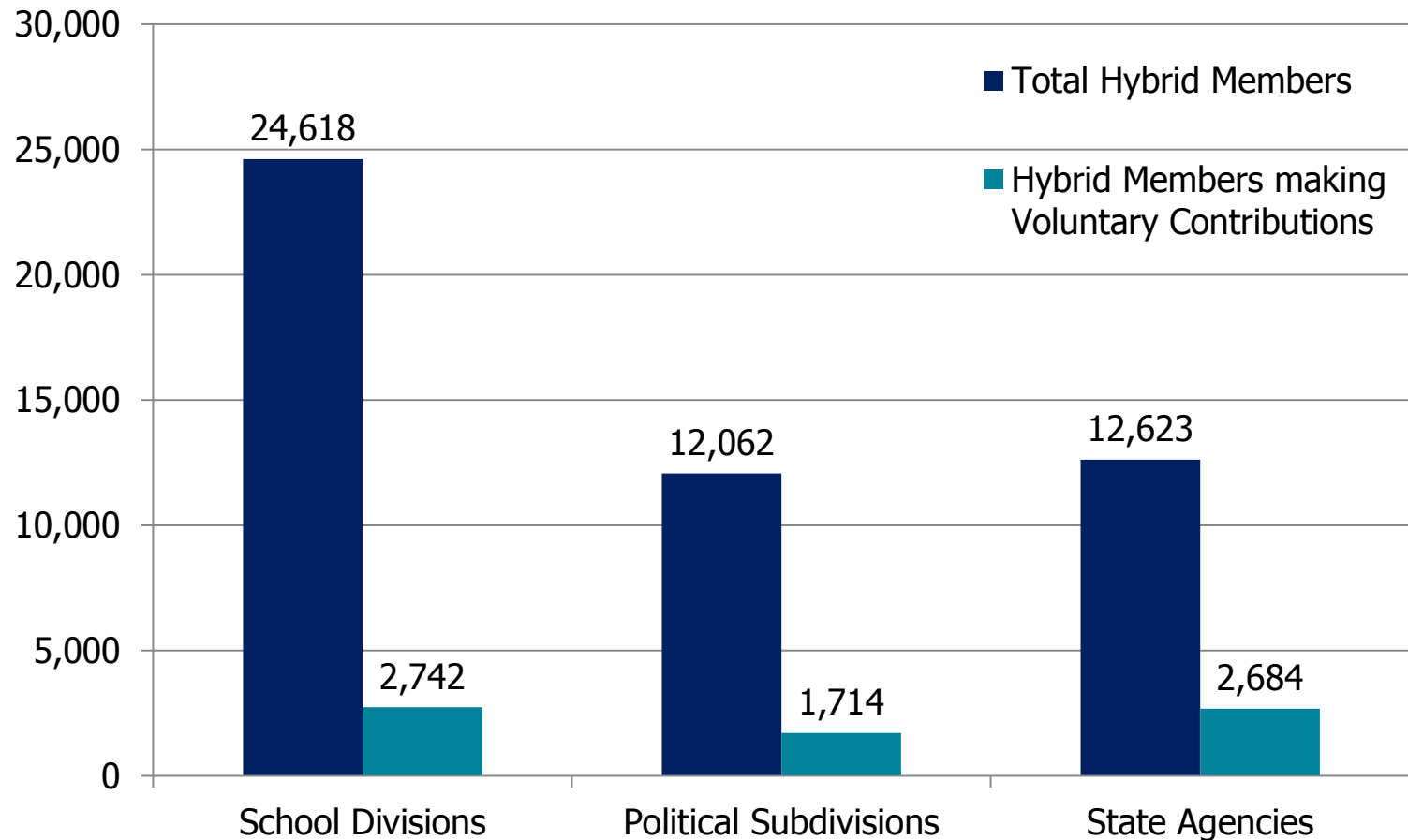


As of July 1, 2016

Hybrid Retirement Plan

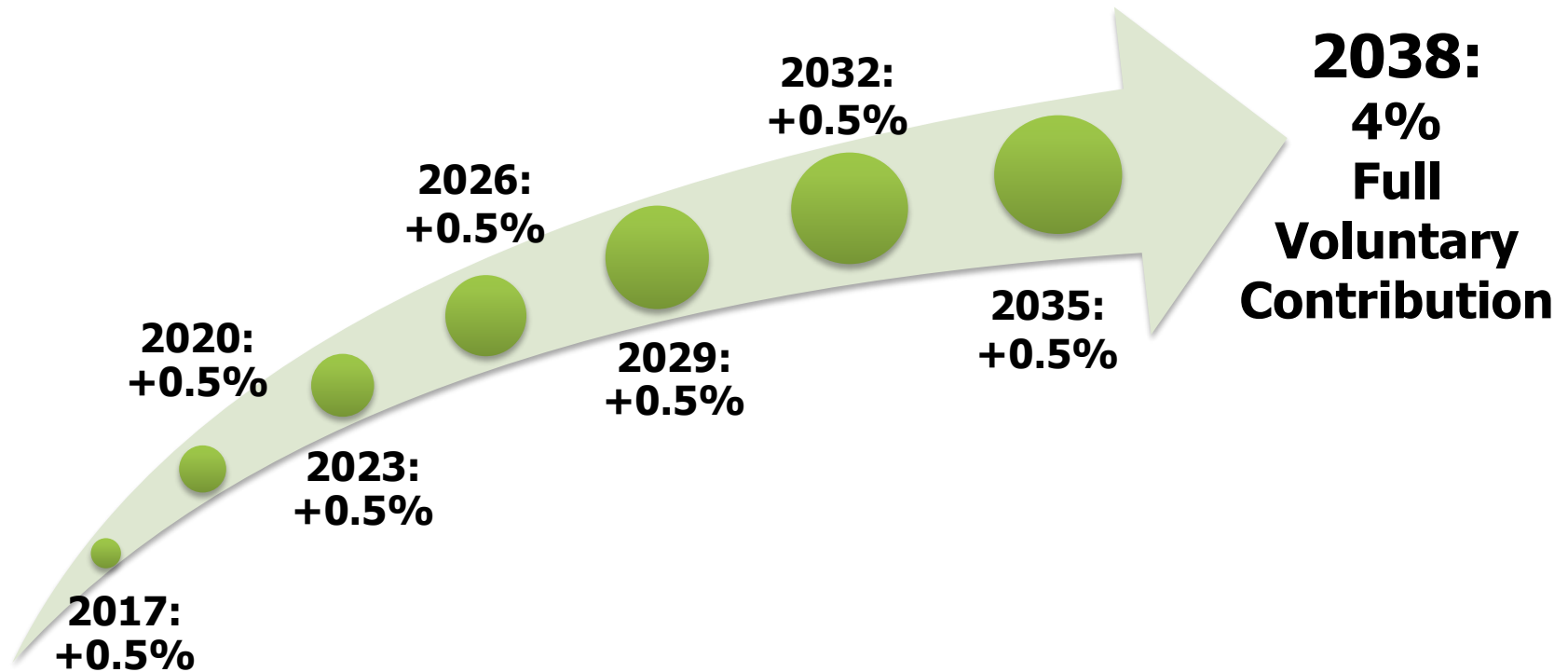


Hybrid Members by Employer Type



As of July 1, 2016

Auto-Escalation for Hybrid Members

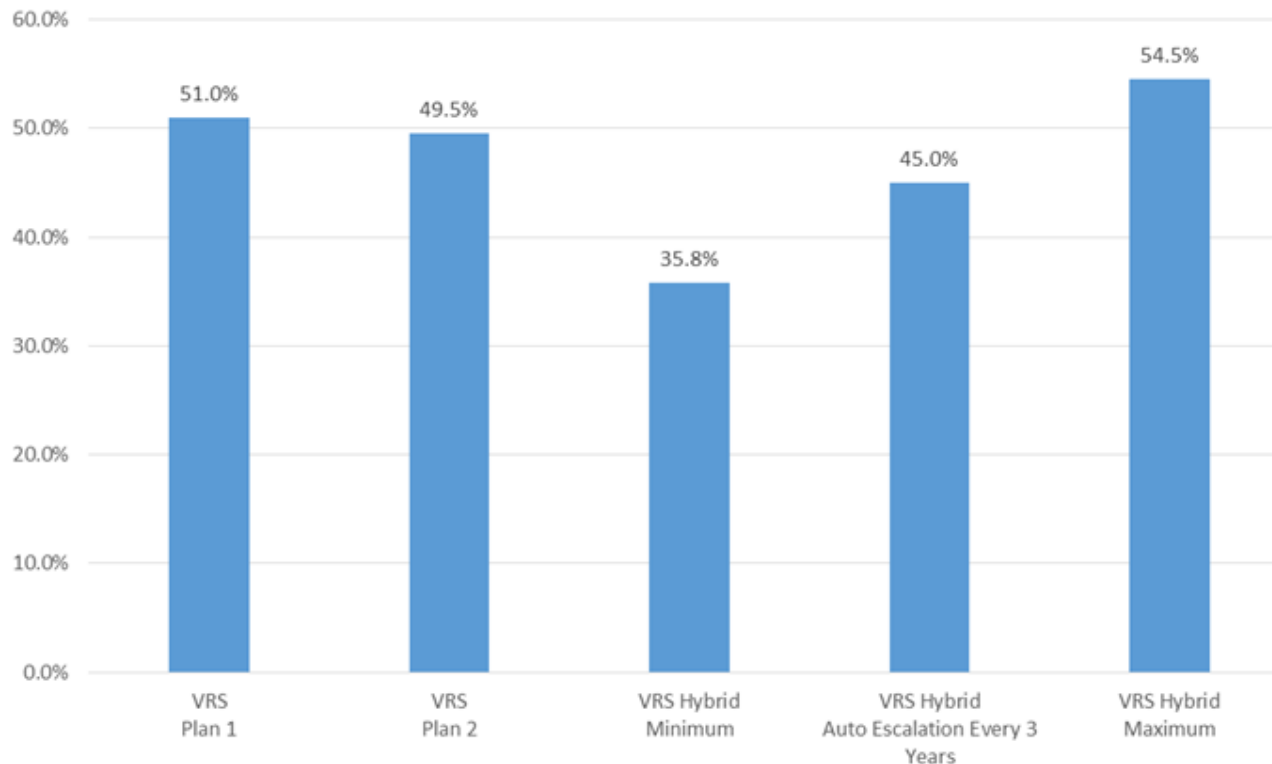


An employee hired prior to September 1, 2016, starting with 0% voluntary contributions, would reach the full voluntary contribution of 4% by 2038, if voluntary contributions only increased every three years as part of auto-escalation.

Hybrid Income Replacement



Approximate Income Replacement Based on 30 Years of Service
Hired at Age 35 and Retire at Age 65



* Analysis assumes defined contribution plan has 6% rate of return on funds while working and 4% return during retirement.

* Hybrid scenarios with auto-escalation and maximum contribution require members to contribute more than 5% of pay towards retirement, with 9% being the maximum they would contribute; other scenarios require employee contribution of 5%.

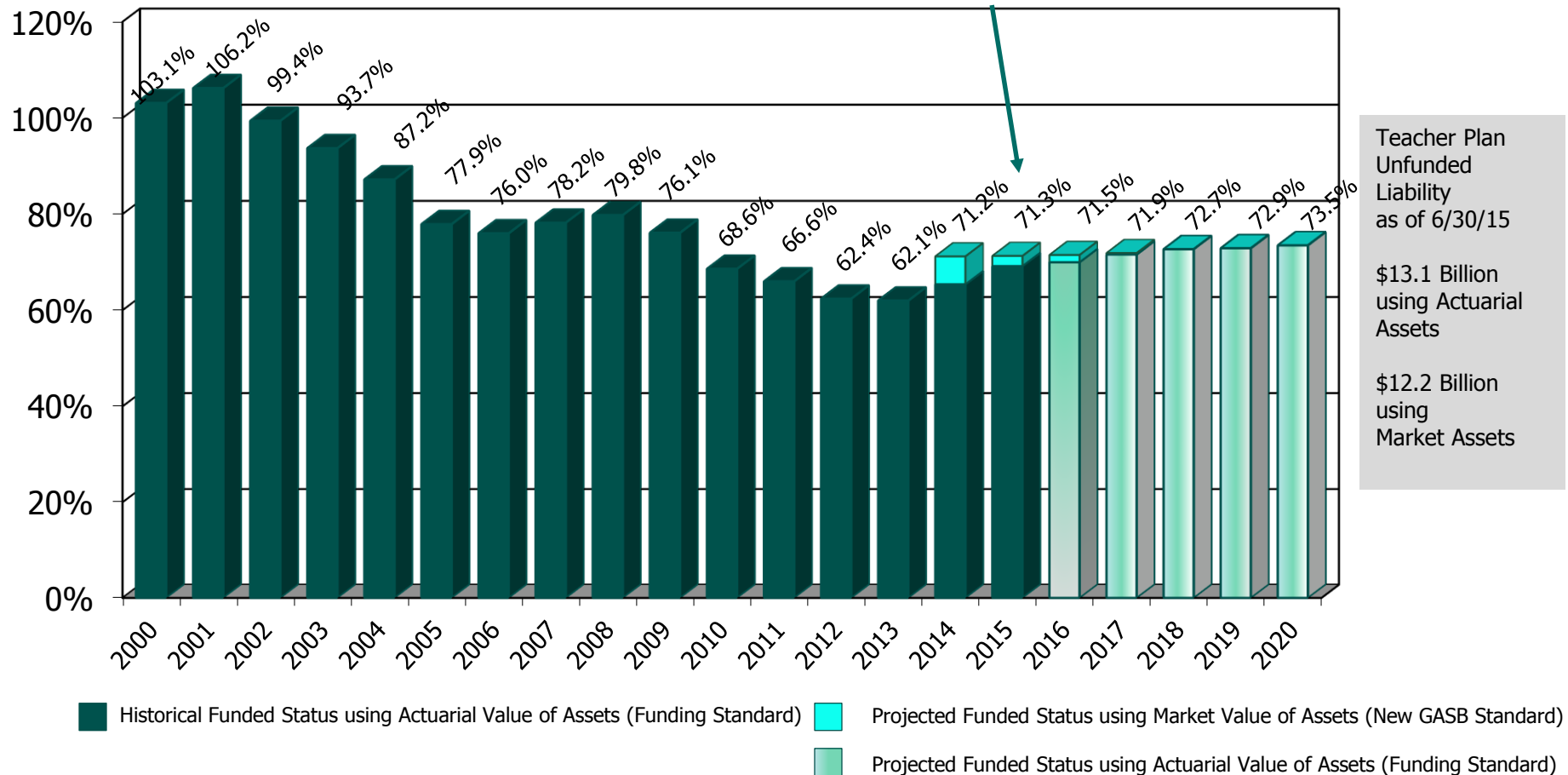


Funded Status and Contribution Rates

Funded Status: Teachers



The funded status for FY 2015 based on the actuarial value of assets was 69.2%.



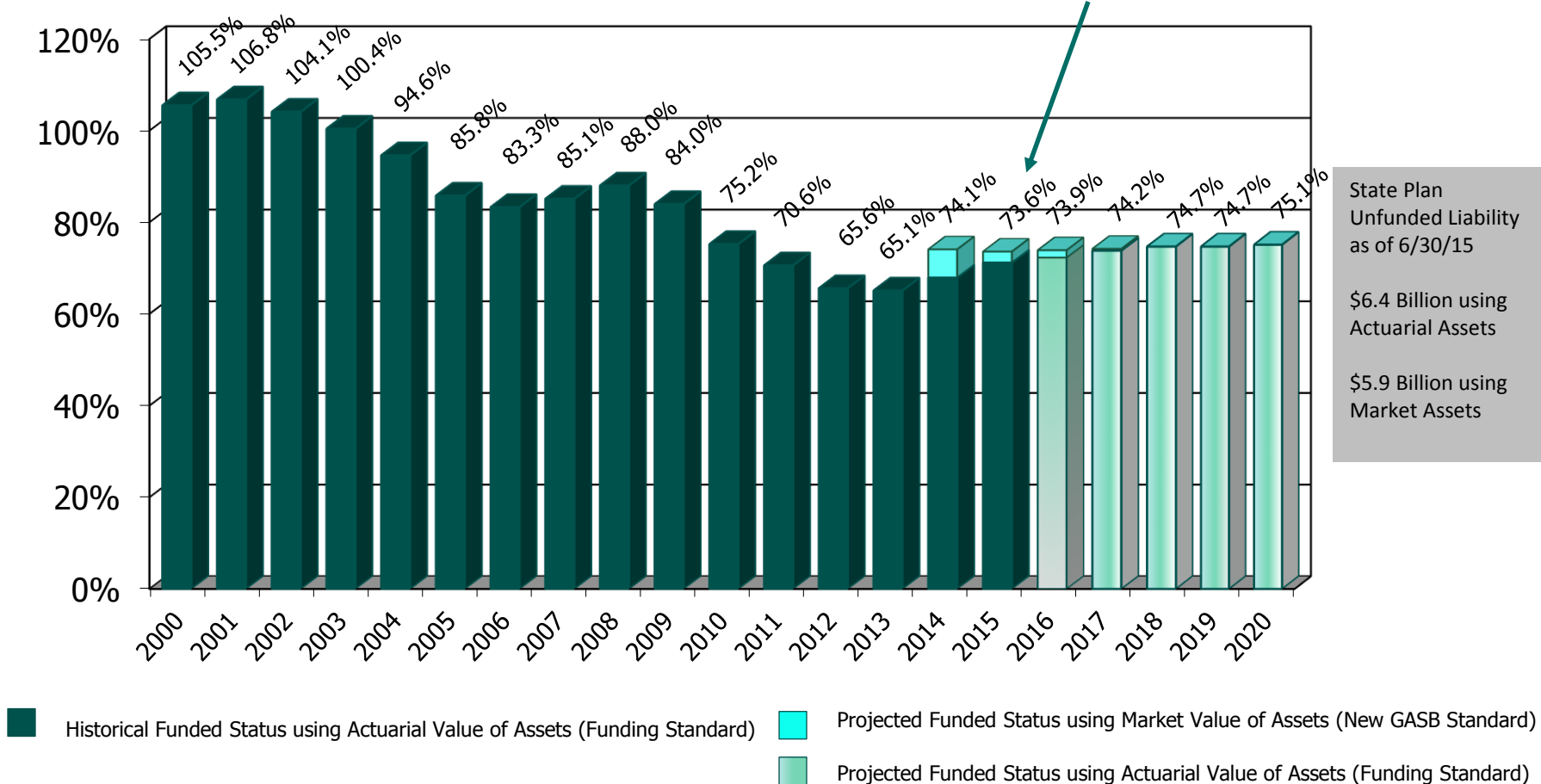
Notes:

- Projected years' investment returns assume 7.0% with 2.5% inflation rate.
- Projected funded status reflects additional \$192.9 million contribution to Teacher Plan on 6/30/15.
- New GASB Accounting Rules reflect funded status using Market Value of Assets effective 6/30/14 for Plan Reporting and 6/30/15 for Employer Reporting.

Funded Status: State Employees



The funded status for FY 2015 based on the actuarial value of assets was 71.2%



Notes:

- Projected years' investment returns assume 7.0% with 2.5% inflation rate.
- New GASB Accounting Rules will reflect funded status using Market Value of Assets effective 6/30/14 for Plan Reporting and 6/30/15 for Employer Reporting.

Contribution Rate Development – State Plan



Development of Employer Normal Cost

	Total Normal Cost Rate % of Payroll		Member Contribution % of Payroll		Employer Normal Cost % of Payroll
Plan 1	9.64%	-	5.00%	=	4.64%
Plan 2	8.95%	-	5.00%	=	3.95%
Hybrid	5.17%	-	4.00%	=	1.17%
Total Blended	9.10%	-	4.92%	=	4.18%
Administrative Expense Load					0.27%
Employer Normal Cost Rate					4.45%

Development of Unfunded Amortization of Liability

	Amortization of Unfunded Liability % of Payroll
Legacy Unfunded (28 Years Remaining)	10.91%
2015 Experience Gain (20 Years Remaining)	-1.18%
2014 Experience Gain (19 Years Remaining)	-0.78%
2011 Deferred Contributions (Paid Off 6/30/16)	0.00%
Total Unfunded Amortization	8.94%

Development of Board Certified Employer Contribution Requirement

Blended Normal Cost Rate		Rate to Amortize Unfunded Liability		Board Certified Rate Defined Benefit Plan		Employer Contribution Rate to Hybrid DC Component		Board Certified Rate
4.45%	+	8.94%	=	13.39%	+	0.10%	=	13.49%

State Employer Contribution Rates Reflecting Deferred Contributions Repayment



	FISCAL YEAR				
	2015	2016	2017	2018	Estimated 2019 & 2020
Phase-In of VRS Certified Rates Agreed Upon in 2012 Legislative Session	78.02%	78.02% (Modified to 90% Effective August 2015)	89.01%	89.01%	100%
Expected Employer Rates Based on Phase-In Schedule	12.33%	14.22%	12.87%	12.87%	13.85%
Employer Rates Based on Enrolled Budget	12.33%	14.22%	14.46%	14.46%	TBD
Employer Rates Based on Enrolled Budget & Deferred Contribution Repayment	12.33%	14.22%	13.49%	13.49%	TBD

Notes:

- Above contribution rates are net of employee contributions.
- State rate for FY 2016 was increased to 90% of Board certified rate effective August 10, 2015 after favorable State revenues for FY 2015 allowed additional funds to go towards contributions.

Teacher Employer Contribution Rates



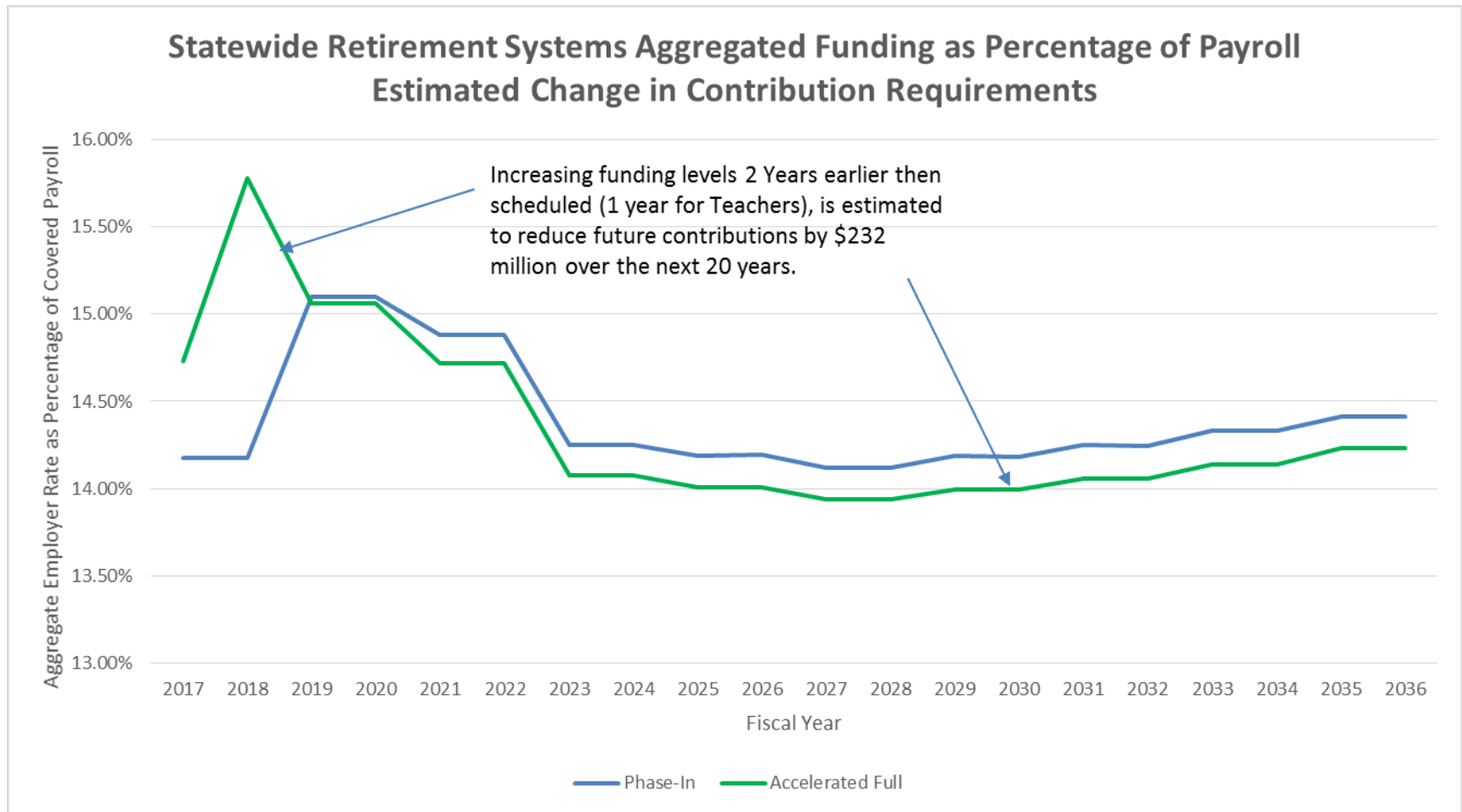
	FISCAL YEAR				Estimated 2019 & 2020
	2015	2016	2017	2018	
Phase-In of VRS Board Certified Rates Agreed Upon in 2012 Legislative Session	79.69%	79.69%	89.84%	89.84%	100%
Expected Employer Rates Based on Phase-In Schedule	14.50%	14.06%	14.66%	14.66%	15.79%
Employer Rates Based on Enrolled Budget	14.50%	14.06%	14.66%	16.32%*	TBD

* Teacher contribution rate is increased to 100% of Board-certified rate in second year of biennium.

Notes:

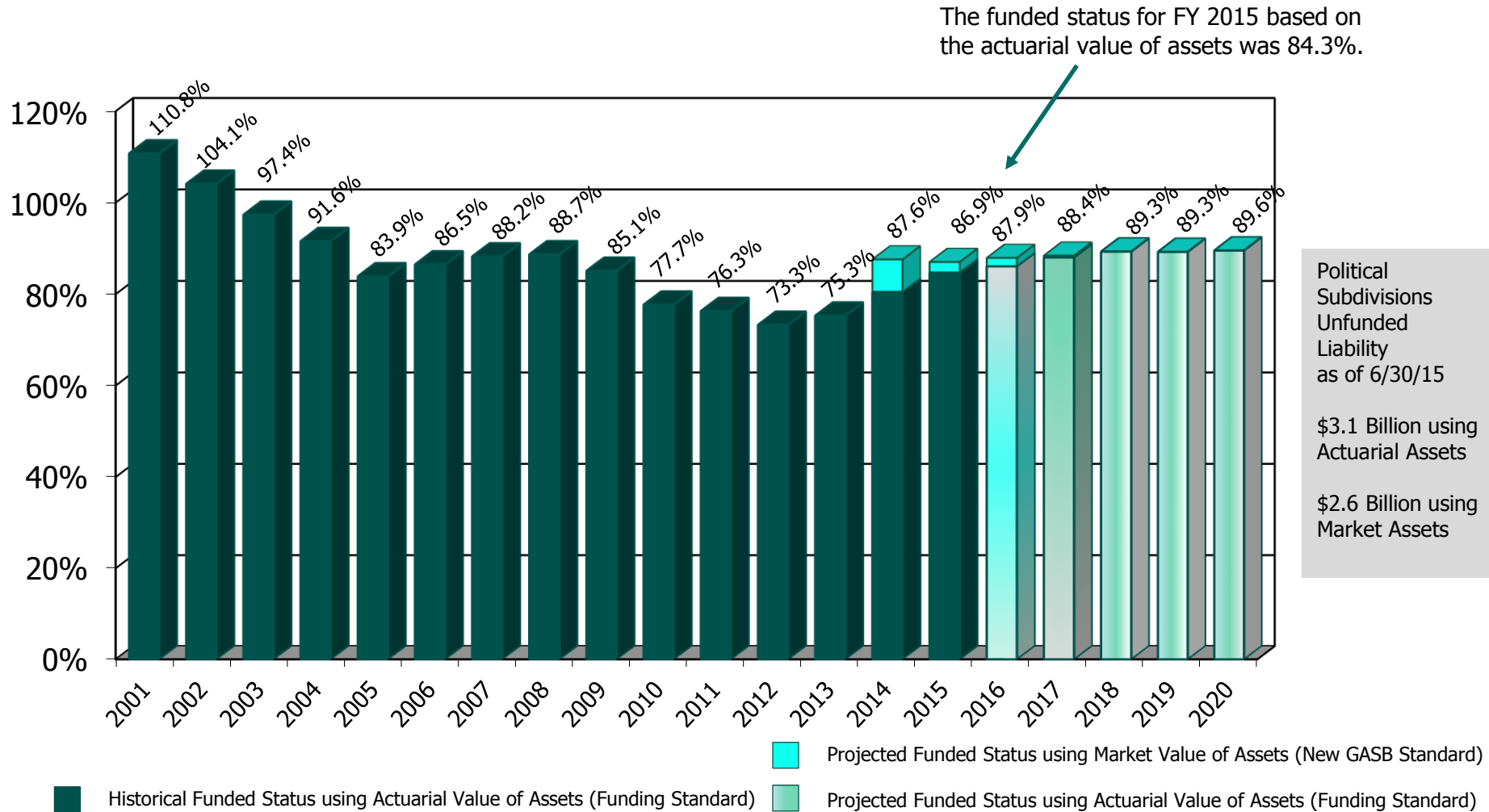
- Above contribution rates are net of employee contributions.
- Teacher rates for FY 2016 decreased due to an additional contribution of \$192.9 million that was applied to the deferred contribution balance in FY 2015. The subsequent rates for FY 2017-20 were also lowered to reflect the accelerated repayment.

Impact of Increasing Funding of Required Contributions



Moving to 100% of required contribution in 2017 will reduce future contribution requirements by approximately \$232 million over the next 20 years.

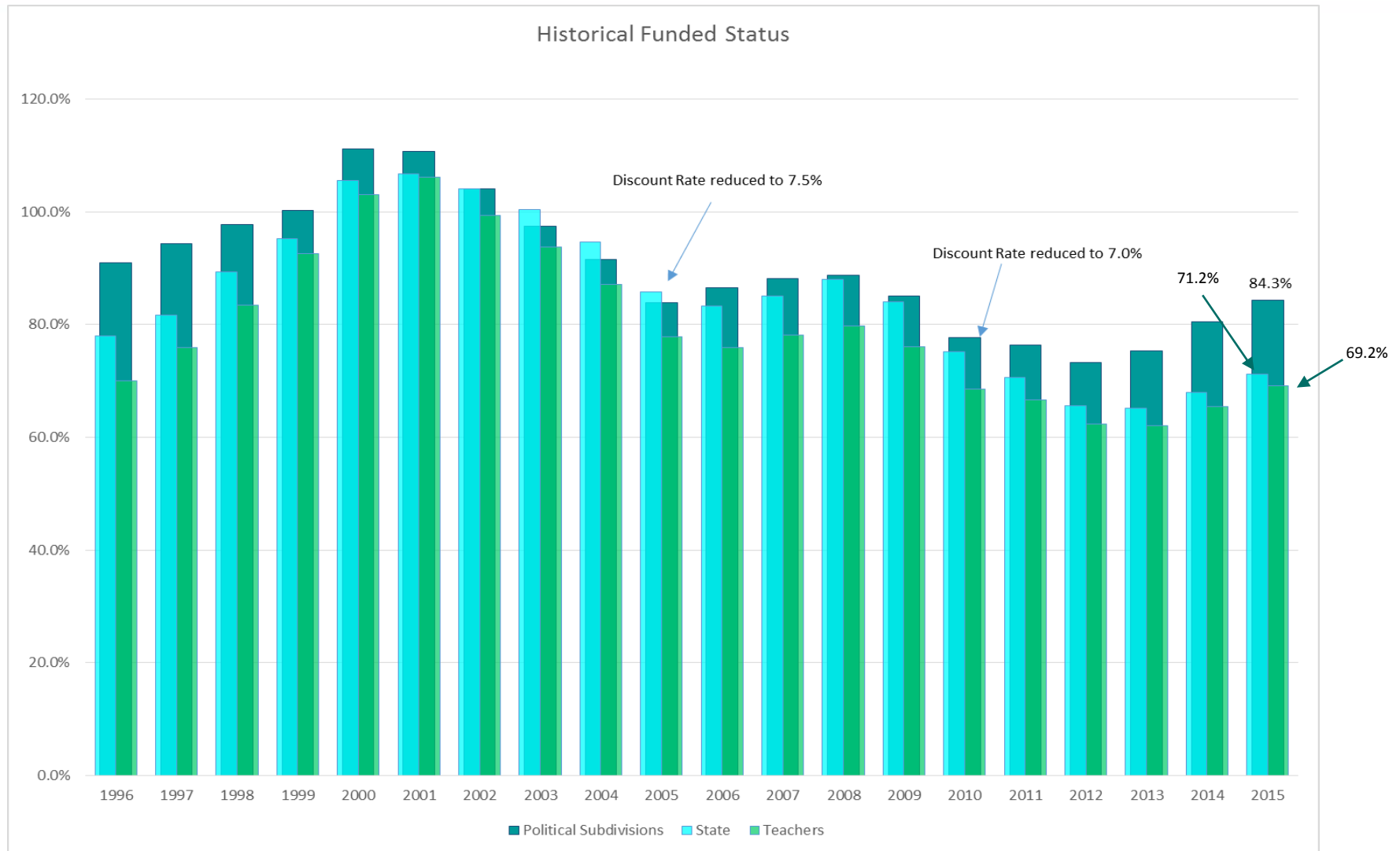
Funded Status: Political Subdivisions in Aggregate



Notes:

- Projected years' investment returns assume 7.0% with 2.5% inflation rate.
- New GASB Accounting Rules reflect funded status using Market Value of Assets effective 6/30/14 for Plan Reporting and 6/30/15 for Employer Reporting.

Funded Status –Comparison of Political Subdivisions to State and Teachers



Political subdivisions are required to contribute 100% of actuarial required contribution which has allowed them to recover more quickly from recent economic downturns.

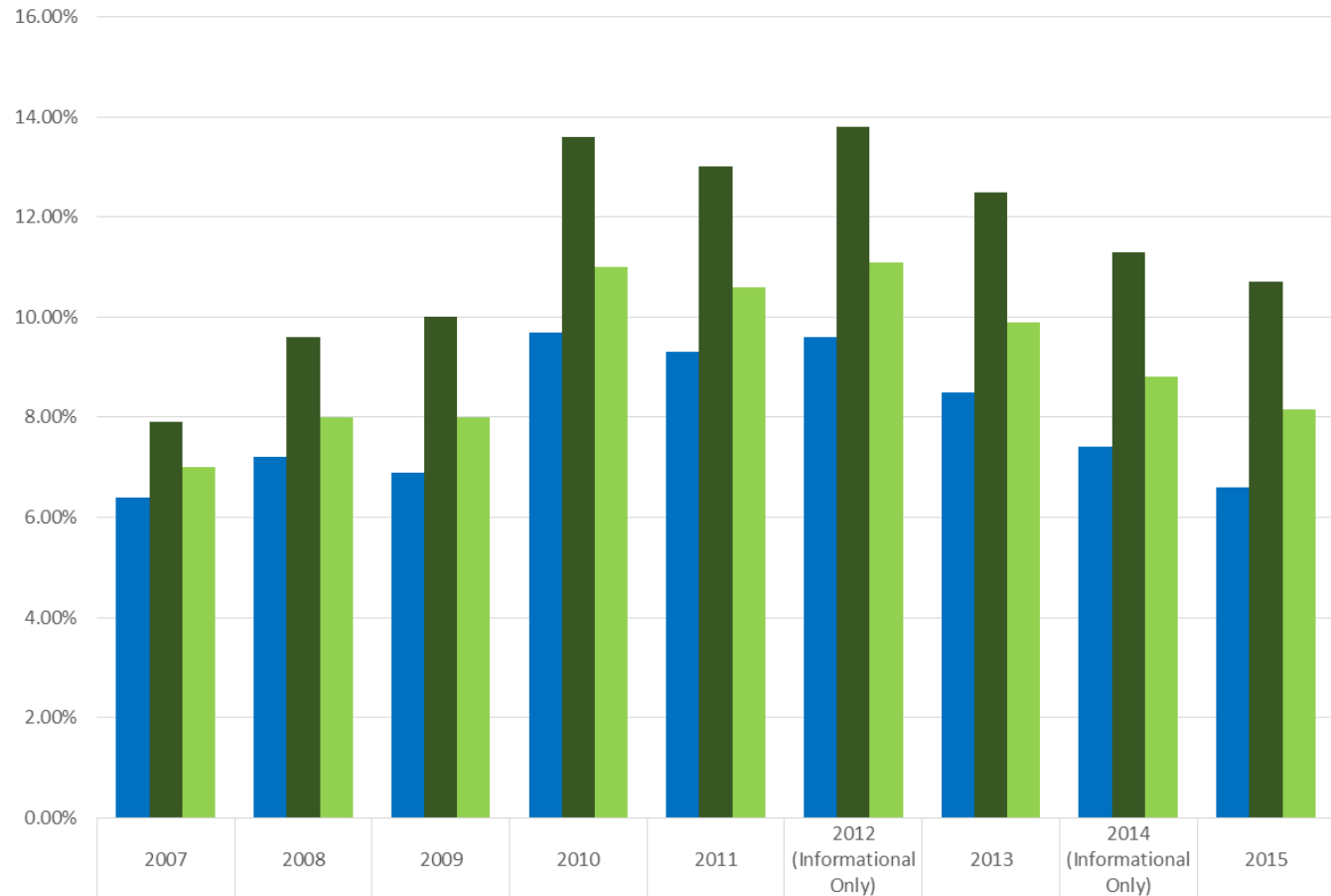
Funded Ratio – Political Subdivisions



	FY 2014		FY 2015	
	Actuarial Value of Assets	Market Value of Assets	Actuarial Value of Assets	Market Value of Assets
All Pension Plans	80.50%	87.60%	84.30%	86.90%
Pension Plans with no Enhanced Hazardous Duty Coverage	87.20%	94.90%	91.50%	94.40%
Pension Plans with Enhanced Hazardous Duty Coverage	78.90%	85.70%	82.50%	85.10%

Average Contribution Rates

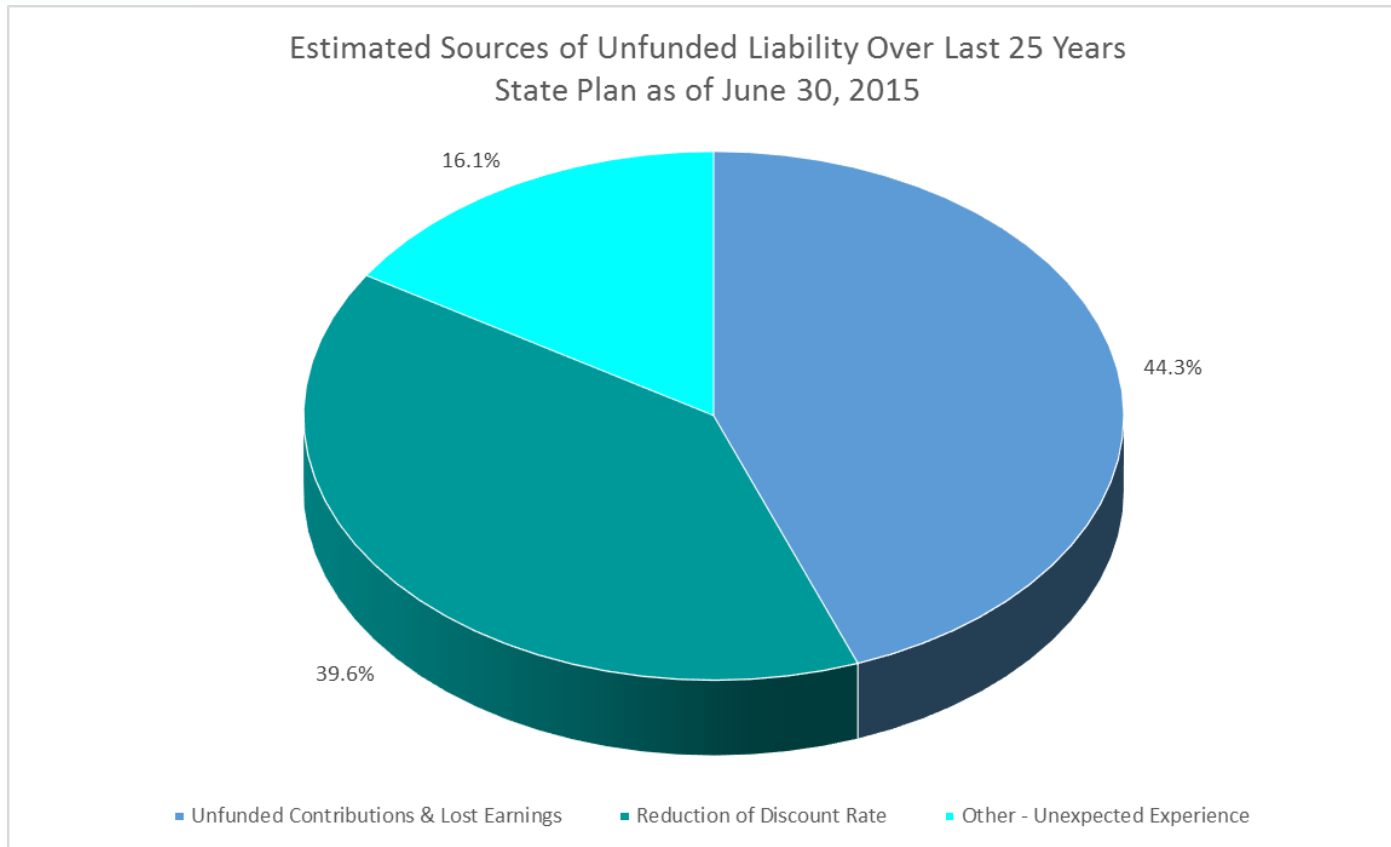
Enhanced Hazardous Duty Coverage/Non-Enhanced Hazardous Duty Coverage



Plans with no Enhanced Haz. Duty Cov.	6.40%	7.20%	6.90%	9.70%	9.30%	9.60%	8.50%	7.40%	6.60%
Plans with Enhanced Haz. Duty Cov.	7.90%	9.60%	10.00%	13.60%	13.00%	13.80%	12.50%	11.30%	10.70%
Total Average	7.00%	8.00%	8.00%	11.00%	10.60%	11.10%	9.90%	8.80%	8.15%

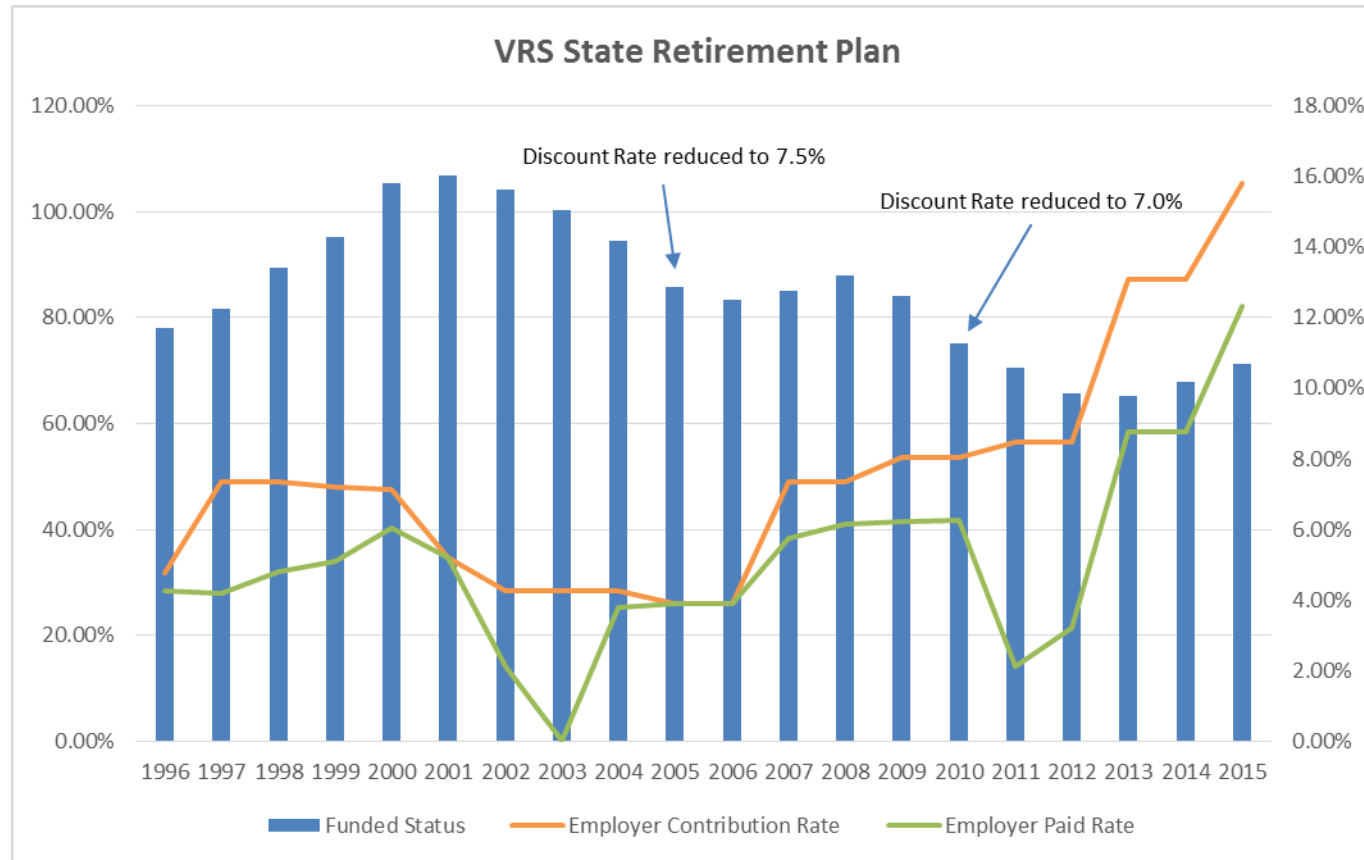
- Rates net of member contribution rate.
- Rates beginning in 2014 include employer contribution rate for Hybrid defined contribution component.

Sources of Unfunded Liability



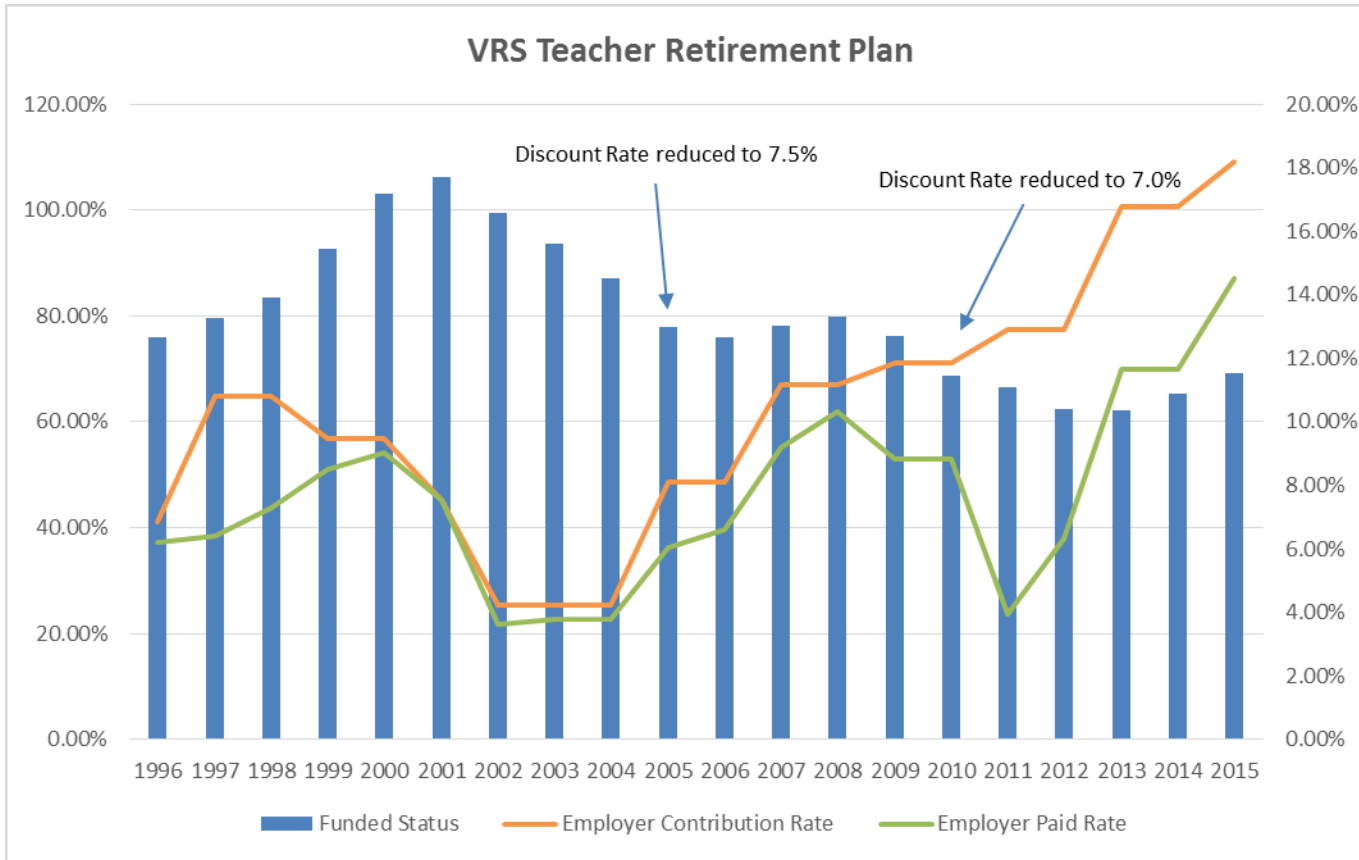
- Unfunded contributions and lost interest earnings on those contributions account for approximately 44% of the State plan unfunded liability, while reductions in the plan funding rate account for nearly 40%.
- The remaining 16% is associated with unexpected plan experience, which would include investment earnings, purchase of prior service, WTA, negative amortization, etc.

Cost of Underfunding



- Since 1996, the state plan has been underfunded by \$1.6 billion in contributions.
- Those contributions, with actual interest earned by the fund, could have reduced unfunded liability by approximately \$2.8 billion today.
- Funded status on market value basis is 73.6% as of June 30, 2015. With extra contributions, funded status would be approximately 86.3%.

Cost of Underfunding



- Since 1996, the teacher plan has been underfunded by \$3.6 billion in contributions.
- Those contributions, with actual interest earned by the fund, could have reduced unfunded liability by approximately \$5.9 billion today.
- Funded status on market value basis is 71.3% as of June 30, 2015. With extra contributions, funded status would be approximately 85.2%.



Summary

- The Commonwealth has undertaken a series of major pension reform initiatives and addressed plan costs and liabilities by:
 - Implementing plan design changes, including the introduction of the Hybrid Retirement Plan
 - Committing to fully funding the actuarially required contribution rates
 - Accelerating payback of deferred contributions from the 2010-2012 biennium
- Bond-rating agencies view pension reform initiatives and funding commitment favorably
- The Governor and General Assembly committed to fully funding contribution rates:
 - Moving to 100% of required contribution in 2017 is estimated to reduce future contribution requirements by approximately \$232 million over the next 20 years.

- Accelerating payment of the deferred contributions further moderates contribution rates:
 - Saves approximately \$26.5 million in interest for State/SPORS/VaLORS/JRS
 - Saves approximately \$34 million in interest for teacher plan
- The impact of Pension Reform will be recognized over time:
 - A long-term plan established for addressing liabilities
 - Commitment to full funding will provide the resources necessary to help pay down the “legacy” unfunded liability
 - The impact of plan design changes will be fully realized as more participants enter new hybrid plan

Thank you!